

0420-0500

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OIPE

RAW SEQUENCE LISTING

DATE: 02/07/2002

PATENT APPLICATION: US/09/888,243

TIME: 13:33:08

Input Set : A:\01997.211003.SEQLIST.TXT

Output Set: N:\CRF3\02072002\I888243.raw

P.S

4 <110> APPLICANT: Horvitz, H. Robert
 5 Yuan, Junying
 6 Shaham, Shai
 8 <120> TITLE OF INVENTION: Relatedness of Human Interleukin-1beta
 9 Convertase Gene to a C. Elegans Cell Death Gene, Inhibitory
 10 Portions of these Genes and Uses Therefor
 13 <130> FILE REFERENCE: 01997/211003
 15 <140> CURRENT APPLICATION NUMBER: US 09/888,243
 16 <141> CURRENT FILING DATE: 2001-06-22
 18 <150> PRIOR APPLICATION NUMBER: US 09/083,662
 19 <151> PRIOR FILING DATE: 1998-05-22
 21 <150> PRIOR APPLICATION NUMBER: US 08/394,189
 22 <151> PRIOR FILING DATE: 1995-02-24
 24 <150> PRIOR APPLICATION NUMBER: US 08/282,211
 25 <151> PRIOR FILING DATE: 1994-07-11
 27 <150> PRIOR APPLICATION NUMBER: US 07/984,182
 28 <151> PRIOR FILING DATE: 1992-11-20
 30 <150> PRIOR APPLICATION NUMBER: US 07/897,788
 31 <151> PRIOR FILING DATE: 1992-06-12
 33 <160> NUMBER OF SEQ ID NOS: 30
 35 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 37 <210> SEQ ID NO: 1
 38 <211> LENGTH: 7653
 39 <212> TYPE: DNA
 40 <213> ORGANISM: Caenorhabditis elegans
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 45 ttgtcgaatt aatatcccta ttatcacttt ttcattgtca tctcagagcg gcacgtcctc 180
 46 aaagaattgt gagagcaaac gcgctcccat tgacctccac actcagccgc caaaacaaac 240
 47 gttcgaacat tcgtgtgttg tgctcctttt ccgttatctt gcagtcattt tttgtcgttt 300
 48 ttttctttgt tctttttgtt gaacgtgttg ctaagcaatt attacatcaa ttgaagaaaa 360
 49 ggctcgccga tttattgttg ccagaaagat tctgagattc tcgaagtcga ttttataata 420
 50 ttttaaccttg gtttttgcatt tgtttcgttt aaaaaaacca ctgtttatgt gaaaaacgat 480
 51 tagtttacta ataaacttac ttttaacct ttacctttac ctcaccgctc cgtgttcattg 540
 52 gctcatagat tttcgatact caaatccaaa aataaattta cgagggcaat taatgtgaaa 600
 53 caaaaacaat cctaagattt ccacatgttt gacctctccg gcaccttctt ccttagcccc 660
 54 accactccat cactcttttg gcggtgttct tcgaaaccca cttaggaaag cagtgtgtat 720
 55 ctcatttggt atgtcttttt cgattttata gctctttgtc gcaatttcaa tgctttaaac 780
 56 aatccaaatc gcattatatt tgtgcatgga ggcaaatgac ggggttgaa tcttagatga 840
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 58 gtcgtccttg gtatcctcaa cttgtcccgg ttttgttttc ggtacactct tccgtgatgc 960
 59 cacctgtctc cgtctcaatt atcgttttaga aatgtgaact gtccagatgg gtgactcata 1020

ENTERED

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62 tatatacaat ccataagaat atcttctcaa tgtttatgat ttcttcgcag cactttctct 1200
63 tcgtgtgcta acatcttatt tttataatat ttccgctaaa attccgattt ttgagtatta 1260
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67 tgtagcgctt gtgtcgattt acgggctcaa tttttgaaaa taattttttt tttcgaattt 1500
68 tgataacccg taaatcgtca caacgctaca gtagtcattt aaaggattac tgtagtctta 1560
69 gctacgagat attttgcgcg ccaaatatga ctgtaatacg cattctctga attttgtgtt 1620
70 tccgtaataa tttcacaga ttttggcatt ccacttttaa ggcgacagc atttattcca 1680
71 atgggtctcg gcacgcaaaa agtttgatag acttttaaat tctccttgca tttttaattc 1740
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74 taaaaataac gatttctcat tgaaaattgt gttttatgtt tgcgaaaata aaagagaact 1920
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77 gcagttgttg gagtttttga cgaaaactag gaaaaaaatc gataaaaatt actcaaatcg 2100
78 agctgaattt tgaggacaat gtttaaaaaa aaacactatt tttccaataa tttcactcat 2160
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107 atgtaaaaaa tgcagtcggt tttttacact tttctgcaca aatgaatagg gggaaaatgt 3900
108 attaaaaatac attttttgta tttttcaaca tcacatgatt aaccccatga tttttctggt 3960

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109 gagcaactta aaaagtagag aatattagag cgaaaaccaa aattttcttca agatattacc 4020
110 tttattgata attatagatg ttaataagca tatcttgaat gaaagtcagc aaaaatatgt 4080
111 gcgaaacacc tgaaaaaaat caaaaattct gcgaaaattg aaaaaatgca ttaaaatata 4140
112 tttttgcatt tttctacatc acatgaatgt agaaaattaa aagggaaatc aaaattttcta 4200
113 gaggatataa ttgaatgaaa cattgcgaaa ttaaaatgtg cgaaacgtca aaaaagagga 4260
114 aattttgggtg tcaaaatcga tcctaaaacc aacacatttc agcatccgcc aactcttcat 4320
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116 ctggaccaac tcaatacata ttccatgaag aggatatgaa ctttgtcgat gcaccaacca 4440
117 taagccgtgt tttcgacgag aaaaccatgt acagaaactt ctcgagtcct cgtggaatgt 4500
118 gcctcatcat aaataatgaa cactttgagc agatgccaac acggaatggt accaaggccg 4560
119 acaaggacaa tcttaccaat ttgttcagat gcatgggcta tacggttatt tgcaaggaca 4620
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121 ccgaaaatgt ggcgcgccgt ctgcacacga caattttgtg taaatgcaaa aatgtataat 4740
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129 tcaaaatttt ttttaacaaa tcgagaaaaa gagaatgaaa aatcgatttt aaaaatatcc 5220
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132 tggacaataa accttcctaa tcaccaaaaa gtaaaattga aatcttcgaa aagccaaaaa 5400
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134 aaatcaattt tctgcaaaat accaaaaaga aacccgaaaa aatttccag ccttgttctc 5520
135 aatgtaaaat gatatttaat ttccagggaa tgctctgac aattcgagac tttgccaaac 5580
136 acgaatcaca cggagattct gcgatactcg tgattctatc acacggagaa gagaatgtga 5640
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139 gttcgttttt tattttaatt ttaataataa tattttaaat aaattcattt tcagaacgtc 5820
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156 aacgaaattt atcgattttt aaatgtaaaa aaaaatagcg aaaattacat caaccatcaa 6840
157 gcatttaagc caaaattgtt aactcattta aaaattaatt caaagttgtc cacgagtatt 6900

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RAW SEQUENCE LISTING

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TIME: 13:33:09

Input Set : A:\01997,211003.SEQLIST.TXT

Output Set: N:\CRF3\02072002\I888243.raw

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158 acacggttgg cgcgcgccaa gtttgcaaaa cgacgctccg cctctttttc tgtgcgggctt 6960
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161 actcgtgatt cattgcccaa ttgataattg tctgtatctt ctccccagat tctcttttcg 7140
162 ccaattagtt taaaaccatg tgtatatattg tctctatac tcatttcact ttatcattct 7200
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164 gtttgtgtct cgaacgcata ataattttta taactcgttt tgaatttgat tagttgttgt 7320
165 gccaggtata tatgtatgta ctatgcttct atcaacaaaa tagtttcata gatcatcacc 7380
166 ccaacccccc caacctaccg taccatattc atttttgccc ggaatcaatt tcgattaatt 7440
167 ttaacctatt ttttcgccac aaaaaatcta atatttgaat taacgaatag cattcccatc 7500
168 tctcccggtg cggaatgcct cccggccttt taaagttcgg aacatttggc aattatgtat 7560
169 aaatttgtag gtccccccca tcatttcccg cccatcatct caaattgcat tcttttttcg 7620
170 ccgtgatata ccgattctgg tcagcaaaga tct 7653

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172 <210> SEQ ID NO: 2

173 <211> LENGTH: 503

174 <212> TYPE: PRT

175 <213> ORGANISM: Caenorhabditis elegans

177 <220> FEATURE:

178 <221> NAME/KEY: VARIANT

179 <222> LOCATION: 27, 65, 360, 403, 412, 428, 449, 466, 483, 486

180 <223> OTHER INFORMATION: Xaa = Any Amino Acid

182 <400> SEQUENCE: 2

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183 Met Met Arg Gln Asp Arg Arg Ser Leu Leu Glu Arg Asn Ile Met Met
184 1 5 10 15
W--> 185 Phe Ser Ser His Leu Lys Val Asp Glu Ile Xaa Glu Val Leu Ile Ala
186 20 25 30
187 Lys Gln Val Leu Asn Ser Asp Asn Gly Asp Met Ile Asn Ser Cys Gly
188 35 40 45
189 Thr Val Arg Glu Lys Arg Arg Glu Ile Val Lys Ala Val Gln Arg Arg
190 50 55 60
W--> 191 Xaa Asp Val Ala Phe Asp Ala Phe Tyr Asp Ala Leu Arg Ser Thr Gly
192 65 70 75 80
193 His Glu Gly Leu Ala Glu Val Leu Glu Pro Leu Ala Arg Ser Val Asp
194 85 90 95
195 Ser Asn Ala Val Glu Phe Glu Cys Pro Met Ser Pro Ala Ser His Arg
196 100 105 110
197 Arg Ser Arg Ala Leu Ser Pro Ala Gly Tyr Thr Ser Pro Thr Arg Val
198 115 120 125
199 His Arg Asp Ser Val Ser Ser Val Ser Ser Phe Thr Ser Tyr Gln Asp
200 130 135 140
201 Ile Tyr Ser Arg Ala Arg Ser Arg Ser Arg Ala Leu His Ser
202 145 150 155 160
203 Ser Asp Arg His Asn Tyr Ser Ser Pro Pro Val Asn Ala Phe Pro Ser
204 165 170 175
205 Gln Pro Ser Ser Ala Asn Ser Ser Phe Thr Gly Cys Ser Ser Leu Gly
206 180 185 190
207 Tyr Ser Ser Ser Arg Asn Arg Ser Phe Ser Lys Ala Ser Gly Pro Thr
208 195 200 205
209 Gln Tyr Ile Phe His Glu Glu Asp Met Asn Phe Val Asp Ala Pro Thr

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210      210      215      220
211 Ile Ser Arg Val Phe Asp Glu Lys Thr Met Tyr Arg Asn Phe Ser Ser
212 225      230      235      240
213 Pro Arg Gly Met Cys Leu Ile Ile Asn Asn Glu His Phe Glu Gln Met
214      245      250      255
215 Pro Thr Arg Asn Gly Thr Lys Ala Asp Lys Asp Asn Leu Thr Asn Leu
216      260      265      270
217 Phe Arg Cys Met Gly Tyr Thr Val Ile Cys Lys Asp Asn Leu Thr Gly
218      275      280      285
219 Arg Gly Met Leu Leu Thr Ile Arg Asp Phe Ala Lys His Glu Ser His
220      290      295      300
221 Gly Asp Ser Ala Ile Leu Val Ile Leu Ser His Gly Glu Glu Asn Val
222 305      310      315      320
223 Ile Ile Gly Val Asp Asp Ile Pro Ile Ser Thr His Glu Ile Tyr Asp
224      325      330      335
225 Leu Leu Asn Ala Ala Asn Ala Pro Arg Leu Ala Asn Lys Pro Lys Ile
226      340      345      350
W--> 227 Val Phe Val Gln Ala Cys Arg Xaa Glu Arg Arg Asp Asn Gly Phe Pro
228      355      360      365
229 Val Leu Asp Ser Val Asp Gly Val Pro Ala Phe Leu Arg Arg Gly Trp
230      370      375      380
231 Asp Asn Arg Asp Gly Pro Leu Phe Asn Phe Leu Gly Cys Val Arg Pro
232 385      390      395      400
W--> 233 Gln Val Xaa Gln Val Trp Arg Lys Lys Pro Ser Xaa Ala Asp Ile Leu
234      405      410      415
W--> 235 Ile Arg Tyr Ala Thr Thr Ala Gln Tyr Val Ser Xaa Arg Asn Ser Ala
236      420      425      430
237 Arg Gly Ser Trp Phe Ile Gln Ala Val Cys Glu Val Phe Ser Thr His
238      435      440      445
W--> 239 Xaa Lys Asp Met Asp Val Val Glu Leu Leu Thr Glu Val Asn Lys Lys
240      450      455      460
W--> 241 Val Xaa Cys Gly Phe Gln Thr Ser Gln Gly Ser Asn Ile Leu Lys Gln
242 465      470      475      480
W--> 243 Met Pro Xaa Met Thr Xaa Arg Leu Leu Lys Lys Phe Tyr Phe Trp Pro
244      485      490      495
245 Glu Ala Arg Asn Ser Ala Val
246      500
249 <210> SEQ ID NO: 3
250 <211> LENGTH: 1373
251 <212> TYPE: DNA
252 <213> ORGANISM: Homo sapiens
254 <220> FEATURE:
255 <221> NAME/KEY: CDS
256 <222> LOCATION: (18)...(1229)
258 <400> SEQUENCE: 3
259 aaaaggagag aaaagcc atg gcc gac aag gtc ctg aag gag aag aga aag      50
260      Met Ala Asp Lys Val Leu Lys Glu Lys Arg Lys
261      1      5      10
263 ctg ttt atc cgt tcc atg ggt gaa ggt aca ata aat ggc tta ctg gat      98

```

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.

VERIFICATION SUMMARY

DATE: 02/07/2002

PATENT APPLICATION: US/09/888,243

TIME: 13:33:10

Input Set : A:\01997.211003.SEQLIST.TXT

Output Set: N:\CRF3\02072002\I888243.raw

L:185 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:453 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:457 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:465 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:558 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:673 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:756 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:774 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:806 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:824 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:865 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:869 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:871 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:875 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:877 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:879 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:881 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:900 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:904 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:906 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:908 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:910 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:990 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:992 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:996 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:998 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:1000 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/888,243

DATE: 02/07/2002

TIME: 13:33:10

Input Set : A:\01997.211003.SEQLIST.TXT

Output Set: N:\CRF3\02072002\I888243.raw

L:1004 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23

L:1023 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24